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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/284,690	07/16/1999	LOUIS ROUSSEAU	VANM107,001A	2677
23850	7590	11/17/2003	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			DOROSHENK, ALEXA A	
			ART UNIT	PAPER NUMBER
			1764	

DATE MAILED: 11/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/284,690

Applicant(s)

ROUSSEAU, LOUIS

Examiner

Alexa A. Doroshenk

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 4 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 4 and 19-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 30, 2003 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 2 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baraldi et al. (4,060,042) in view of Giraud (3,916,806).

With respect to claims 2 and 17, Baraldi et al. discloses an apparatus for the pyrolysis of waste comprising:

a rotating cell formed of a cylindrical sections (7) and (8) wherein the diameter of section (7) is larger than that of section (8) and the two sections are connected by a region (6) which extends between the larger diameter (7) and smaller diameter (8) sections (this region (6) reads on a "retaining threshold" as defined by applicant's specification, p. 3, lines 23-28);

a hopper (10) for charging waste at one end of the rotating cell;

an ash box (32) at the other end of the rotating cell; and

a recovery chimney (39).

Baraldi et al. discloses wherein the material of section (8) is to be "substantially burned" (col. 4, lines 7-15) but does not disclose wherein section (8) of the rotating cell is of a truncated conical formation.

Giraud teaches also teaches a rotating cell for incineration of refuse wherein the incineration chamber is of a truncated conical shape (152). Giraud further discloses that the truncated conical combustion shape "ensures a substantially uniform speed of flow for all the constituents under treatment" and teaches that a cylindrical form has undesirable results of incomplete destruction of the materials (col. 2, lines 30-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching Giraud of a truncated conical formation for an incineration/combustion portion of a rotating cell in order to ensure the complete combustion of the materials in that section, as desired by Baraldi et al.

With respect to claims 16 and 18, Baraldi et al. disclose wherein the connecting region (6) is of a conical shape (see fig. 1).

Response to Arguments

4. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both references are directed to apparatus for the rotating combustion of waste and Giraud teaches an advantage to having a truncated conical combustion region over a cylindrical region (as in Baraldi) in order to ensure uniform flow and complete combustion of materials in the combustion region.

Applicant states that Giraud "uses a frustoconical shape to avoid a discontinuity between the precombustion and combustion zones (see Giraud at col. 2, lines 15-16), and to ensure the mixing of the solid and liquid waste (see Giraud at col. 2, lines 35-37)".

The examiner does not find the cited portions of Giraud to disclose what applicant describes. At col. 2, lines 15-16 and beyond, Giraud states:

"The one piece chamber having an oscillating movement around its axis, and thus with no break in continuity between its different zones, removes the difficulties inherent in the presence of joints at the connections between fixed and turning parts of known rotating furnaces in the zones through which the treated refuse flows."

Giraud states that the "one piece chamber" is formed of three coaxial parts (see col. 2, lines 3-13) and it appears to the examiner, contrary to applicant's assertion, to be only stating that all three parts are connected as one rotating unit to avoid difficulties in these rotating parts joined by fixed connections.

At col. 2, lines 35-37 and beyond, Giraud states:

"The truncated conical part...ensures a substantially uniform speed of flow for all the constituents under treatment, be they more or less viscous or liquid, in contradistinction to the known cylindrical furnace in which the flow speed differences between the more liquid compounds

and less liquid materials result in excessively rapid flow time in the furnace for the most liquid refuse, which is consequently incompletely destroyed.”

It appears to the examiner, contrary to applicant's assertion, that Giraud is stating an advantage to using a truncated conical part over a cylindrical formation to ensure uniform speed of materials and have complete destruction of the materials.

In response to applicant's argument that Baraldi and Giraud are incompatible because the motivation for providing a step in Baraldi is irreconcilable with the reasons for avoiding such a step in Giraud, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The examiner notes that the primary reference of Baraldi contains a step and that Giraud has not been relied upon for providing a step. Motivation for the combination has been provided, above, for Giraud's teaching of the advantage of a truncated conical combustion chamber over a cylindrical combustion chamber.

Applicant argues that one would be taught away from modifying the cylindrical combustion zone of Baraldi into a frustoconical shape because of the air flow.

The examiner does not find this argument persuasive because applicant has not supported this assertion by any evidence.

Allowable Subject Matter

5. Claims 4 and 19-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The prior art does neither disclose nor suggest motivation for providing a network of combustion air-distribution nozzles to the truncated cone portion, placing a recovery chimney on the cylinder portion of the rotating cell, or having the main longitudinal axis of the rotating cell to be inclined with respect to the horizontal; and it is noted that such modifications would destroy the Baraldi et al. reference as discussed in the interview of August 26, 2003 and as presented in pages 9-10 of applicants arguments filed September 30, 2003.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 703-305-0074. The examiner can normally be reached on Monday - Thursday from 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

Application/Control Number: 09/284,690
Art Unit: 1764

Page 7

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

After December 11, 2003 the examiner can be reached at her new telephone number 571-272-1446 and the examiner's supervisor, Glenn Caldarola, can be reached at his new telephone number 571-272-1444.


Alexa Doroshenk
Patent Examiner
Art Unit 1764

November 11, 2003